AIR QUALITY PERMIT

Issued To: Bates Construction, Inc
20323 Norris Road
Manhattan, MT 59741

Permit: #2960-01
Application Complete: 02/27/03
Preliminary Determination Issued: 03/27/03
Department's Decision Issued: 04/14/03
Permit Final: 04/30/03
AFS: #777-2960

An air quality permit, with conditions, is hereby granted to Bates Construction, Inc. (Bates), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq*., as amended, for the following:

SECTION I. Permitted Facilities

A. Plant Location

Bates operates a portable crushing/screening plant at various locations throughout Montana. The plant will originally locate at the Northwest ¼ of Section 10, Township 3 South, Range 4 East, in Gallatin County, Montana. Permit #2960-01 applies while operating at any location within Montana. However, a Missoula County air quality permit will be required for locations within Missoula County, Montana. In addition, an addendum to Permit #2960-01 will be required for locations in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter less than 10 microns (PM_{10}) nonattainment areas.

B. Current Permit Action

On February 27, 2003, Bates submitted a complete application for a modification to Montana Air Quality Permit #2960-00. The application requested the Department of Environmental Quality (Department) to modify the permit to include a 1999 JCI Cone Crusher (400 tons per hour maximum capacity), a 1999 JCI Three-Deck Screen (450 tons per hour maximum capacity), and a 300-kilowatt (kW) diesel generator to the permit. Bates also requested the Department to remove a 113-kW diesel generator from the permit. The current permit action modifies the permit to reflect the proposed changes. A complete list of the permitted equipment is included in Section I.A. of the permit analysis.

SECTION II. Conditions and Limitations

A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) affected crusher shall not exhibit an opacity of 15% or greater averaged over 6-consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).

2. All visible emissions from any other NSPS affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6-consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR, Subpart OOO).

3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

4. Water and water spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749 and ARM 17.8.752).

5. Bates shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).

6. Bates shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749 and ARM 17.8.752).

7. Bates shall not operate more than two crushers at any given time and the combined maximum rated design capacity shall not exceed 750 tons per hour (ARM 17.8.749).

8. Total combined crushing production of the two crushers shall not exceed 5,168,400 tons during any rolling 12-month time period (ARM 17.8.749).

9. Bates shall not operate more than two screens at any given time and the combined maximum rated design capacity shall not exceed 800 tons/hour (ARM 17.8.749).

10. Total combined screening production of the two screens shall not exceed 5,168,400 tons during any rolling 12-month time period (ARM 17.8.749).

11. Bates shall not operate more than one diesel generator at any given time and the maximum rated design capacity shall not exceed 300 kW (ARM 17.8.749).

12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Bates, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749 and ARM 17.8.752).

13. Bates shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants, as appropriate (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO).

2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures manual (ARM 17.8.106).

3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).

2. Bates shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. Bates shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

   The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

4. Bates shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records complied in accordance with this permit shall be maintained by Bates as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request.

5. Bates shall document, by month, the total combined crushing production from the facility. By the 25th day of each month, Bates shall sum the total combined crushing production of the facility during the previous 12 months to verify compliance with the limitation in Section II.A.8. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).

6. Bates shall document, by month, the total combined screening production from the facility. By the 25th day of each month, Bates shall sum the total combined screening production of the facility during the previous 12 months to verify compliance with the limitation in Section II.A.10. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).

D. Notification

Bates shall provide the Department with written notification of the actual startup date of the crushing/screening facility within 15 days after the actual startup date of the facility (ARM 17.8.749).

SECTION III. General Conditions

A. Inspection – Bates shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Bates fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Bates of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq*. (ARM 17.8.756)

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq*., MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final until 15 days have elapsed and there is no request for a hearing under this section.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Bates may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Construction Commencement – Construction must be begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

J. Bates shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department approved permitting program.

Permit Analysis
Bates Construction, Inc.
Permit #2960-01

I. Introduction/Process Description

A. Permitted Equipment

Bates Construction, Inc. (Bates), owns and operates a portable crushing/screening facility. Equipment used at the facility includes, but is not limited to, the following:

1. (1) 1995 Torgerson Impact Crusher (350 tons per hour maximum capacity)
2. (1) 1999 JCI Cone Crusher (400 tons per hour maximum capacity)
3. (1) 1978 JCI Two-Deck Screen (350 tons per hour maximum capacity)
4. (1) 1999 JCI Three-Deck Screen (450 tons per hour maximum capacity)
5. (1) diesel generator (up to 300-Kilowatt (kW) maximum capacity)
6. Associated equipment (load hopper, conveyors, transfer points, etc.)

B. Source Description

For a typical operational setup, aggregate is loaded into the feed hopper where the grizzly separates the aggregate. The grizzly prevents larger material that the downstream equipment cannot process from being conveyed to the JCI Two-Deck Screen. The material not rejected by the grizzly is conveyed to the two-deck screen for sizing. From the two-deck screen, the material is either conveyed to a stockpile or to the Torgerson Impact Crusher. From the impact crusher, the material is either conveyed back to the two-deck screen for further sizing and/or crushing, or sent to the JCI Three-Deck Screen. The three-deck screen separates the aggregate and the material is either conveyed to the JCI Cone Crusher or to a stockpile. From the cone crusher, the material is either conveyed back to the three-deck screen for further sizing and/or crushing, or to a stockpile. The stockpiled aggregate is then transferred to the job site where it will be utilized for various construction industries.

C. Permit History

On August 2, 1996, the Department of Environmental Quality (Department) received a complete permit application from Bates requesting a permit for the operation of a portable crushing/screening facility consisting of a 1995 Torgerson Impact Crusher, a 1978 El Jay Two-Deck Screen, two 1996 Spomac 24'X40' Conveyors, a 1996 42'X20' homebuilt conveyor, a 1996 113 kW Cummins Diesel Generator; and associated equipment. Permit **#2960-00** was issued final on March 11, 1996.

D. Current Permit Action

On February 27, 2003, Bates submitted a complete application for a modification to Permit #2960-00. The application requested the Department to modify the permit to include a 1999 JCI Cone Crusher (400 tons per hour maximum capacity), a 1999 JCI Three-Deck Screen (450 tons per hour maximum capacity), and a 300-kilowatt (kW) diesel generator to the permit. Bates also requested the Department to remove a 113-kW diesel generator from the permit. The current permit action modifies the permit to reflect the proposed changes. Permit **#2960-01** replaces Permit #2960-00.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

   Bates shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

Bates must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Bates shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.

6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60. In order for a crushing/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility, and second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Bates, the crushing/screening equipment permitted in Permit #2960-01 may be subject to NSPS requirements (40 CFR Part 60, Subpart A – General Provisions, and 40 CFR Part 60, Subpart OOO – Nonmetallic Mineral Processing Plants). At the time Permit #2960-01 was issued, the 1995 Torgerson Impact Crusher, the 1999 JCI Cone Crusher, and the 1999 JCI Three-Deck Screen, and any other associated equipment manufactured after August 31, 1983, are subject to NSPS requirements.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Bates submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

   An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 – Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit modification if they construct, alter or use any asphalt plant, crusher or screen that has the potential to emit greater than 15 tons per year of any pollutant. Bates has the potential to emit more than 15 tons per year of particulate matter, PM_{10}, and NO_x; therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Bates submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Bates submitted an affidavit of publication of public notice for the February 20, 2003, issue of the *Bozeman Daily Chronicle*, a newspaper of general circulation in the Town of Bozeman in Gallatin County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Bates of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit can be transferred from one location to another if written notice of Intent to Transfer is sent to the Department. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's potential to emit is less than 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

   a. Potential to Emit (PTE) > 100 tons per year of any pollutant

   b. PTE > 10 tons per year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons per year of a combination of all HAPs, or lesser quantity as the Department may establish by rule, or

   c. PTE > 70 tons per year of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2960-01 for Bates, the following conclusions were made.

   a. The facility's PTE is less than 100 tons/year for any pollutant.

   b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.

   c. The facility is not located in a serious PM_{10} nonattainment area.

   d. This facility is potentially subject to current NSPS standards (40 CFR Part 60, Subpart A and Subpart OOO).

   e. This facility is not subject to any current NESHAP standards.

   f. This source is neither a Title IV affected source nor a solid waste combustion unit.

   g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Bates will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Bates may be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or altered source. Bates shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. The Department reviewed previous BACT determinations for other recently permitted similar sources prior to making the following BACT determination.

All visible emissions from any NSPS affected crusher shall not exhibit an opacity of 15% or greater averaged over 6-consecutive minutes. All visible emissions from any other NSPS affected equipment such as screens and conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6-consecutive minutes. In addition, all visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6-consecutive minutes. Further, if the permitted equipment is used in conjunction with any other equipment owned or operated by Bates, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period.

Water and water spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations. Further, Bates shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter. Reasonable precautions consist of treating all unpaved portions of the haul roads, access roads, parking lots, and the general plant area with water and/or chemical dust suppressant, as necessary, to control emissions of airborne particulate matter. The Department determined that using water spray bars, water, and/or chemical dust suppressant to maintain compliance with the opacity limitations and reasonable precautions requirements constitutes BACT in this case.

Due to the relatively small amount of particulate matter, PM_{10}, NO_x, CO, and SO_x emissions resulting from the operation of the portable generator and the cost of controlling the pollutants, add-on pollution control equipment would be cost prohibitive. Therefore, the Department determined that no additional controls will constitute BACT for the portable generator in this case.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

	Tons/Year					
Source	**TSP**	**PM_{10}**	**NOx**	**VOC**	**CO**	**SO_x**
Torgerson Impact Crusher (350 TPH)	3.23	1.55	------	------	------	------
JCI Cone Crusher (400 TPH)	3.23	1.55	------	------	------	------
JCI 2 Deck Screen (350 TPH)	20.35	9.69	------	------	------	------
JCI 3 Deck Screen (450 TPH)	20.35	9.69	------	------	------	------
Material Transfer	29.98	14.47	------	------	------	------
Pile Forming	10.85	5.17	------	------	------	------
Bulk Loading	5.43	2.58	------	------	------	------
Diesel Generator (300 kW)	3.88	3.88	54.62	4.35	11.77	3.61
Haul Roads	1.23	1.23	------	------	------	------
Totals	100.03	49.82	54.62	4.35	11.77	3.61

V. Existing Air Quality

The facility's initial site location is the Northwest ¼ of Section 10, Township 3 South, Range 4 East, in Gallatin County, Montana. Gallatin County is unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.

VI. Air Quality Impacts

In the view of the Department, the amount of controlled emissions generated by the operation of the portable crushing/screening plant will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be minor and short-lived.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air and Waste management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Bates Construction, Inc.

Air Quality Permit number: 2960-01

Preliminary Determination Issued: 03/27/03
Department Decision Issued: 04/14/03
Permit Final: 04/30/03

1. Legal Description of Site: The crushing/screening plant would originally operate at the Northwest ¼ of Section 10, Township 3 South, Range 4 East, in Gallatin County, Montana. Permit #2960-01 would apply while operating at any location within Montana. However, an addendum to Permit #2960-01 would be required to locate in or within 10 km of certain PM_{10} nonattainment areas and a Missoula County air quality permit would be required for locations within Missoula County, Montana.

2. Description of Project: Bates proposes to add a 400 ton per hour JCI Cone Crusher and a 450 ton per hour JCI Three-Deck Screen to their crushing/screening facility. In addition, Bates proposes to replace a 113-kW diesel generator with a 300 kW diesel generator.

3. Objectives of Project: The objective of the project would be to generate additional business and revenue for the company. The project would allow Bates the opportunity to bid on additional, larger projects.

4. Alternatives Considered: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Bates demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a BACT analysis, would be included in Permit #2960-01.

6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites			X			Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic life and Habitats

Minor, if any, impacts on terrestrial or aquatic life and habitats would be expected from the proposed project because the proposed project would take place at an existing crushing/screening facility located within a previously disturbed open-cut pit. In addition, the proposed project would only increase the facility's potential to emit by a relatively small amount. While air emissions from the facility would increase due to the proposed project and a corresponding increase in deposition of pollutants would occur, as described in Section 7.F. of this EA, the Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants and the atmosphere, and conditions that would be included in Permit #2960-01.

B. Water Quality, Quantity and Distribution

Although the proposed project would result in increased air emissions, there would be minor, if any, impacts on the water quality, quantity, and distribution in the area of the facility because the proposed project would only increase the facility's potential to emit by a relatively small amount. While air emissions from the facility would increase, and corresponding deposition of pollutants would occur, as described in Section 7.F. of this EA, the Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants and the atmosphere and conditions that would be placed in Permit #2960-01.

Further, water would be required for dust suppression. However, because of the relatively small size and temporary nature of the operation, only minor amounts of water would be required for adequate dust suppression; therefore, any impacts on water quality, quantity, or distribution would be minor.

C. Geology and Soil Quality, Stability and Moisture

Minor, if any, impacts would occur on the geology and soil quality, stability, and moisture from the proposed project because the project would take place at an existing crushing/screening facility located within a previously disturbed open-cut pit and because the proposed project would only increase the facility's potential to emit by a relatively small amount. While air emissions from the facility would increase due to the proposed project, and a corresponding increase in deposition of pollutants would occur, as described in Section 7.F. of this EA, the Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants and the atmosphere, and conditions that would be included in Permit #2960-01.

D. Vegetation Cover, Quantity, and Quality

Minor, if any, impacts would occur on vegetation cover, quantity, and quality because the proposed project would take place at an existing crushing/screening facility located within a previously disturbed open-cut pit. While air emissions from the facility would increase due to the proposed project, and a corresponding increase in deposition of pollutants would occur, as described in Section 7.F. of this EA, the Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants and the atmosphere, and conditions that would be included in Permit #2960-01. .

E. Aesthetics

The proposed project would be visible and would create additional noise in the area. However, the proposed project would take place at an existing crushing/screening facility located within a previously disturbed open-cut pit and the proposed project would be a relatively small addition to the facility. In addition, Permit #2960-01 would include conditions to control emissions, including visible emissions, from the crushing/screening facility. Because the crushing/screening plant is relatively small, temporary, and seasonal, any aesthetic impact to the area would be minor.

F. Air Quality

Air quality impacts from the proposed project would be minor because the proposed project would be relatively small. The proposed project would take place at an existing crushing/screening facility and would only increase the facility's emissions by a relatively small amount. Deposition of pollutants would occur as a result of the proposed project; however, the Department determined that any air quality impacts from deposition would be minor due to dispersion characteristics of pollutants (stack height, stack temperature, etc.), the atmosphere (wind speed, wind direction, ambient temperature, etc.), and conditions placed in Permit #2960-01.

Permit #2960-01 would include conditions limiting the opacity from the proposed project, as well as the entire facility. In addition, Permit #2960-01 would include conditions requiring reasonable precautions be taken to control emissions from haul roads, access roads, parking lots, and the general work area. Further, Permit #2960-01 would also limit total emissions from the crushing/screening facility and any additional Bates equipment operated at the same site to 250 tons per year or less. Further, the Department determined that the crushing/screening facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's potential to emit is below the major source threshold level of 100 tons per year for any regulated air pollutant.

G. Unique Endangered, Fragile, or Limited Environmental Resources

There would be an increase in emissions in the area where the crushing/screening plant would operate, which could result in minor impacts to existing unique endangered, fragile, or limited environmental resources in any given area of operation. However, the crushing/screening facility would originally locate within a previously disturbed open-cut pit that is normally used for such activities. Due to the seasonal and portable nature of the operations, the relatively small size of the facility, and the fact that the area where the facility would originally operate has been used for such activities, any impacts to unique endangered, fragile, or limited environmental resources would be minor.

H. Demands on Environmental Resource of Water, Air and Energy

The proposed project would require only small quantities of water and air for proper operation due to the relatively small size of the facility and conditions that would be placed in Permit #2960-01. Small amounts of water would be used for dust control on the surrounding roadways and the associated job site. In addition, as described in Section 7.F. of this EA, air emissions generated from the facility would have minor impacts on air quality in the immediate and surrounding area. However, the operation of the crushing/screening facility is seasonal. Seasonal operations would result in fewer demands on the environmental resource of water and air. Further, the facility utilizes a diesel generator to provide power to the facility; therefore, there would be no impact on energy demand in any given area of operation. While the demand on the non-renewable resource of diesel fuel would increase due to the proposed project, any impacts would be minor due to the seasonal nature of the operations and the relatively small size of the facility. Overall, the demands on the environmental resource of water, air, and energy would be minor.

I. Historical and Archaeological Sites

The proposed project would increase emissions in the area where the crushing/screening plant would operate, which could result in minor impacts to existing historical and archaeological sites in the area. However, the crushing/screening operation would originally locate within a previously disturbed open-cut pit that is normally used for such activities. According to past correspondence from the Montana Historical Society, State Historic Preservation Office (SHPO), there would be a low likelihood of disturbance to any known archaeological or historical site given any previous industrial disturbance in the area of operation. Given the seasonal and portable nature of the operations, the relatively small size of the facility, and the fact that the area where the facility would originally operate is typically used for such operations, the chance of impacting any historical and archaeological sites would be minor.

J. Cumulative and Secondary Impacts

The proposed project would cause minor effects on the physical and biological aspects of the human environment because the project would generate emissions of particulate matter, PM_{10}, NO_x, CO, SO_x, and VOC. Conditions that would be placed in Permit #2960-01 would ensure that no air quality impacts, other than minor air quality impacts, would occur. Noise impacts would be minor due the seasonal and portable nature of the operation, and the relatively small size of the project. Impacts from noise would be seasonal and temporary because the crushing/screening facility would be permitted as a portable source so the facility would typically move to other locations. Limitations would be established in Permit #2960-01 to minimize air pollution.

There is potential for other operations to locate at the same site that the crushing/screening facility would use. However, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. These permits would address the environmental impacts associated with the operations at the proposed site. The crushing/screening facility would be limited by Permit #2960-01 to total emissions of 250 tons per year or less from non-fugitive emissions sources at any given site. Overall, any impacts to the physical and biological environment would be minor.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals				X		Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed project would not cause any disruption to native or traditional lifestyles or communities (social structures and mores) because the proposed project would take place at an existing crushing/screening facility located within a previously disturbed open-cut pit and because the proposed project would only increase the facility's potential to emit by a relatively small amount. The predominant use of the proposed area of operation would not change as a result of issuing Permit #2960-01.

B. Cultural Uniqueness and Diversity

The proposed project would not impact the cultural uniqueness and diversity of the proposed area because the proposed project would take place at an existing crushing/screening facility located within a previously disturbed open-cut pit and because the proposed project would only increase the facility's potential to emit by a relatively small amount. The predominant use of the proposed area of operation would not change as a result of issuing Permit #2960-01.

C. Local and State Tax Base and Tax Revenue

The proposed project would have minor, if any, impacts on local and state tax base and tax revenue because the proposed project would take place at an existing crushing/screening facility. The facility would be a temporary and seasonal source and no additional full time or permanent employees would be expected to be hired as a result of issuing Permit #2960-01. In addition, any revenue created by the proposed project would be widespread and would be for a relatively short time period due to the temporary and seasonal nature of the facility.

D. Agricultural or Industrial Production

The proposed project would take place at an existing crushing/screening facility located in a previously disturbed industrial area typically used for such operations. Therefore, the Department would not expect that the crushing/screening facility would affect or displace any agricultural land or production. Further, the crushing/screening facility would be small by industrial standards and would have only minor impacts on any local industrial production. Overall, any impacts to agricultural or Industrial production would be minor.

E. Human Health

Permit #2960-01 would incorporate conditions to ensure that the proposed project, as well as the entire crushing/screening facility, would be operated in compliance with all applicable rules and regulations. These rules and regulations are designed to be protective of human health. As described in Section 7.F. of this EA, the Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants and the atmosphere, and conditions that would be included in Permit #2960-01. Pollution controls and opacity limitations on the crushing/screening facility, associated equipment, and the surrounding operational area would minimize the air emissions from this facility. Therefore, any impacts to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would not affect any access to recreational and wilderness activities because the proposed project would take place at an existing crushing/screening facility located in a previously disturbed industrial area typically used for such operations. In addition, the proposed project would have minor impacts on the quality of recreational activities because the noise and emissions generated by the proposed project would represent a relatively small increase in noise and emissions from the crushing/screening facility. Overall, the proposed project would result in only minor impacts to access to and quality of recreational and wilderness activities.

G. Quantity and Distribution of Employment

Given the relatively small size and temporary nature of the operation and the fact that the proposed project would take place at an existing crushing/screening facility, the quantity and distribution of employment in the area would not be affected. No full time, permanent employees would be expected to be hired or discharged as a result of issuing Permit #2960-01. The proposed project would not result in any impact to the quantity and distribution of employment in the proposed area of operation.

H. Distribution of Population

Given the relatively small size and temporary nature of the operation and the fact that the proposed project would take place at an existing crushing/screening facility located within a previously disturbed open-cut pit, the proposed project would not disrupt the normal population distribution of the area. Further, the proposed project would not create new employment opportunities with Bates or with any surrounding businesses, so a change in population distribution would not occur.

I. Demands for Government Services

Government services would be required for acquiring the appropriate permit for the proposed project and ensuring compliance with the permit that would be issued. However, the government services required for issuing the permit would be minor. In addition, the government services required to ensure compliance with the permit would be a small increase in government services because government services are currently required to ensure the facility is in compliance with it's current permit. There could be an increase in vehicle traffic resulting from the proposed project; however, any demands on government services to regulate the traffic would be minor due to the relatively small upgrade that the proposed project would represent for the crushing/screening facility. Overall, the demands for government services would be minor.

J. Industrial and Commercial Activity

The proposed project would represent only a minor increase in the industrial activity in the area due to the relatively small size of the proposed project. No additional industrial or commercial activity would result solely from the operation of the crushing/screening facility, but some of the product may be supplied to industrial and commercial sources. Any impacts to industrial and commercial activities in the area would be minor due to the relatively small size and seasonal nature of the crushing/screening facility.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would be affected by issuing Permit #2960-01. The state standards would protect the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

Overall, impacts to the social and economic aspects of the human environment from this project would be minor because new businesses would not be drawn to the area and permanent jobs would not be created or lost due to the proposed project. Because no new employees would be hired due to the operation of the crushing/screening facility, there would be no economic impacts from new employees. In addition, any social and economic impacts would be minor and short-lived because of the relatively small size of the facility, and the seasonal and temporary nature of the operation.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permit action is for the addition of a 400 ton per hour crusher and a 450 ton per hour screen to an existing crushing/screening facility. In addition the current permit action would replace a 113-kW diesel generator with a 300-kW diesel generator at the crushing/screening facility. Permit #2960-01 includes conditions and limitations to ensure that the facility would operate in compliance with all applicable rules and regulations. In addition, there would be no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air and Waste management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

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